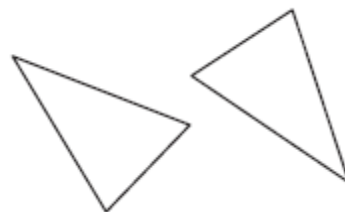


# Geometry 4.2 Assignment Congruence & Triangles (pp 202-210)

1. What is your name?

2. Label the vertices of your triangles so that  $\triangle YDB \cong \triangle SUR$ . Identify all pairs of congruent *corresponding angles* and *corresponding sides*.



**Complete the statement.**

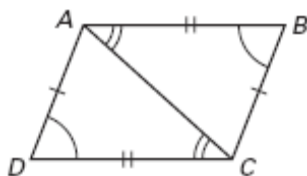
3. If  $\triangle LFA \cong \triangle VEN$ , then  $\angle E \cong$  \_\_\_\_\_

4. If  $\triangle DCN \cong \triangle WBL$ , then  $\overline{BW} \cong$  \_\_\_\_\_

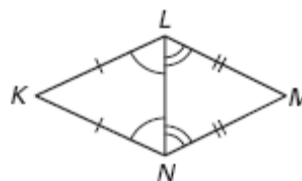
5.  $\triangle ABD \cong \triangle CDB$ , then  $\triangle DAB \cong \triangle$  \_\_\_\_\_

**State the figures that can be proved congruent. Explain your reasoning. For those that can be proved congruent, write the congruence statement.**

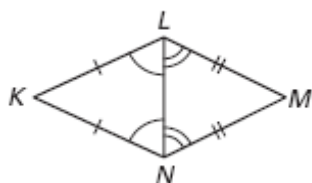
6.



7.



8.

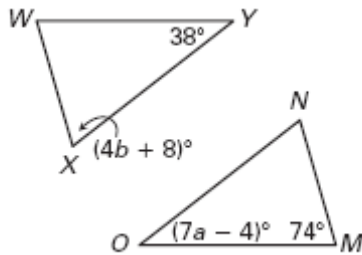


# Geometry 4.2 Assignment

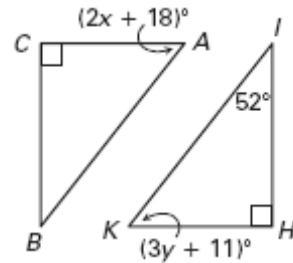
## Congruence & Triangles (pp 202-210)

Use the given letters to find the values of the variables.

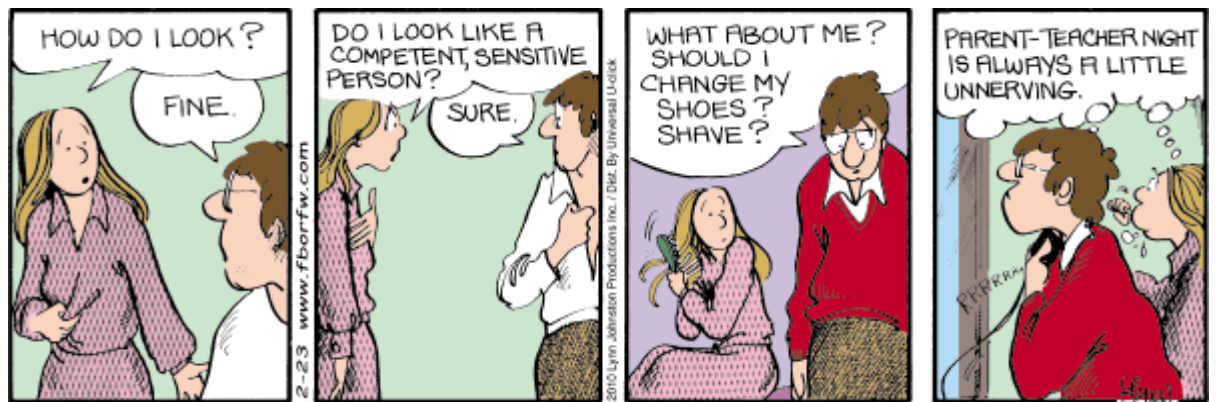
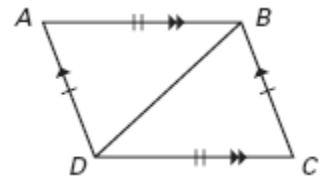
9. Given:  $\triangle WXY \cong \triangle MNO$



10. Given:  $\triangle CBA \cong \triangle HKI$



11. Given:  $\overline{AD} \parallel \overline{BC}$ ,  $\overline{AB} \parallel \overline{DC}$ ,  $\overline{AD} \cong \overline{BC}$ ,  $\overline{AB} \cong \overline{DC}$   
 Prove:  $\triangle ABD \cong \triangle CDB$



## Geometry 4.2 Assignment Congruence & Triangles (pp 202-210)

### Review.

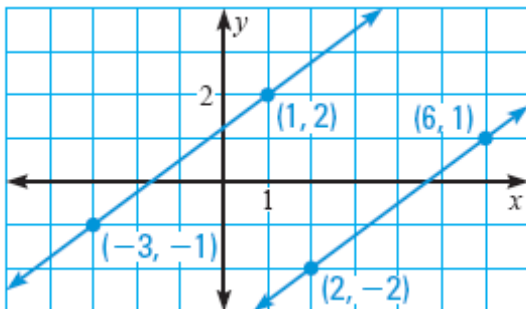
**12. Find the distance between the pair of points: E(-2, -6) & (3, -5)**

*(Chapter 1 Section 3)*

**13. Find the coordinates of the midpoint of the segment: S(-6, -2) & T(8, 2)** *(Chapter 1 Section 5)*

**14.  $\angle 1$  &  $\angle 2$  are complementary. Find  $m\angle 2$  if  $m\angle 1 = 62^\circ$**  *(Chapter 1 Section 6)*

**15. Find the slope of each line. Are the lines parallel?** *(Chapter 3 Section 6)*

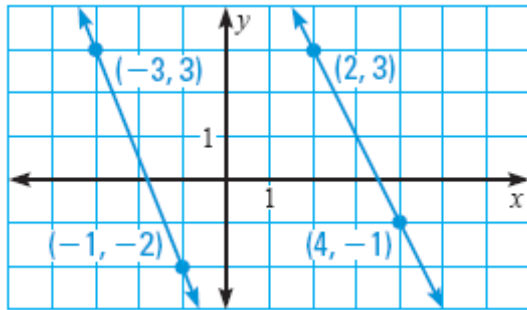


# Geometry

## 4.2 Assignment

### Congruence & Triangles (pp 202-210)

16. Find the slope of each line. Are the lines parallel? (Chapter 3 Section 6)



While Mr. Hunter was not looking, students in his chemistry class used lab tubing to escape, one at a time.